



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

Doh

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/008,547	11/09/2001	Karl Maurer	0109	6750
28869	7590	11/16/2005		EXAMINER
				SOWARD, IDA M
			ART UNIT	PAPER NUMBER
			2822	

DATE MAILED: 11/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/008,547	MAURER, KARL	
	Examiner Ida M. Soward	Art Unit 2822	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 26 October 2005.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-3 and 9-11 is/are rejected.
- 7) Claim(s) 4-8 and 12-15 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date 5-27-2005.
- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

DETAILED ACTION

This Office Action is in response to the Applicants' remarks filed October 26, 2005.

Specification

The objection to the abstract has been withdrawn.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3 and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heller et al. (US 6,245,508 B1) in view of Dai et al. (US 6,406,791 B1).

In regard to claim 1, Heller et al. teach a coated semiconductor device having a plurality of electrodes embedded therein and exposed to an upper surface, and a coating layer 14 coating the upper surface of the semiconductor device, wherein the coating layer is from about 0.5 to about 100 microns thick and is composed of a mixture of controlled porosity glass (CPG) particles having an average particle size of from

about 0.25 to about 25 microns (Figures 2A-2B, columns 10-12 and 18, lines 1-67, 1-64, 23-31 and 18-35, respectively).

In regard to claim 2, Heller et al. teach the thickness of the coating layer 14 is from about 1 to about 25 microns (Figures 2A-2B, column 12, lines 23-31).

In regard to claim 3, Heller et al. teach the thickness of the coating layer 14 is from about 3 to about 15 microns (Figures 2A-2B, column 12, lines 23-31).

In regard to claim 9, Heller et al. teach a formulation for coating a semiconductor device, wherein the semiconductor device comprises a plurality of electrodes 12, comprising a mixture of controlled porosity glass (CPG) particles 14 having an average particle size of from about 0.25 to about 25 microns (Figures 2A-2B, columns 10-12 and 18, lines 1-67, 1-64, 23-31 and 18-35, respectively).

In regard to claim 10, Heller et al. teach the thickness of the coating layer 14 is from about 1 to about 25 microns (Figures 2A-2B, column 12, lines 23-31).

In regard to claim 11, Heller et al. teach the thickness of the coating layer is from about 3 to about 15 microns (Figures 2A-2B, column 12, lines 23-31).

However, Heller et al. fail to teach a thickening agent.

Dai et al. teach a thickening agent (column 4, lines 13-26).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the coated semiconductor device as taught by Heller et al. with the coated semiconductor device having a thickening agent as taught by Dai et al. to enhance the properties of the materials (column 4, lines 13-26).

Allowable Subject Matter

Claims 4-8 and 12-15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patents are cited to further show the state of the art with respect to coated semiconductor devices:

Clemens et al. (US 6,544,596 B2) Katoh et al. (5,672,460).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ida M. Soward whose telephone number is 571-272-1845. The examiner can normally be reached on Monday - Thursday 6:30am to 5:00pm.

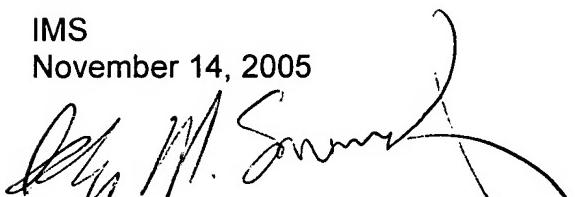
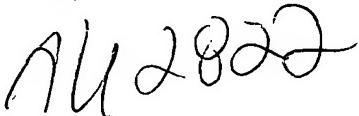
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zandra V. Smith can be reached on 517-272-2429. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2822

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

IMS

November 14, 2005


A handwritten signature in black ink, appearing to read "M. Sonnenfeld".

A handwritten number "142822" in black ink.